	Type	L #	Hits	Search Text	DBs
1	BRS	L1	3	((dependency! adj graph$6) and debug$6 and package$1)	USPAT; EPO; JPO; Derwent; IBM TDB
2	BRS	L7	0	1 and (code! adj object$1)	USPAT; EPO; JPO; Derwent; IBM TDB
3	BRS	L13	256	(code! adj object$1) and (object$1oriented)	USPAT; EPO; JPO; Derwent; IBM TDB
4	BRS	L19	15	13 and recursive and dependenc$3	USPAT; EPO; JPO; Derwent; IBM TDB
5	BRS	L25	4	19 and debug$6	USPAT; EPO; JPO; Derwent; IBM TDB
6	BRS	L31	3	25 and database$1	USPAT; EPO; JPO; Derwent; IBM TDB
7	BRS	L37	2	31 and pars$3 and incorporat$3	USPAT; EPO; JPO; Derwent; IBM TDB
8	BRS	L43	0	((dependency! adj tree$1) and trigger$1 and debug$6)	USPAT; EPO; JPO; Derwent; IBM TDB
9	BRS	L55	0	49 and (code! adj object$1) and (object$1oriented)	USPAT; EPO; JPO; Derwent; IBM TDB
10	BRS	L49	3	((dependency! near4 tree$1) and trigger$1 and debug$6)	USPAT; EPO; JPO; Derwent; IBM TDB
11	BRS	L61	0	((dependency! adj tree$1) and (code! adj object$1))	USPAT; EPO; JPO; Derwent; IBM TDB
12	BRS	L67	27	dependency! adj tree$1	USPAT; EPO; JPO; Derwent; IBM TDB
13	BRS	L73	3	67 and recursive and dependenc$3	USPAT; EPO; JPO; Derwent; IBM TDB
14	BRS	L79	0	73 and debug$6	USPAT; EPO; JPO; Derwent; IBM TDB
15	BRS	L85	1	73 and database$1	USPAT; EPO; JPO; Derwent; IBM TDB
16	BRS	L97	7	91 and recursive and dependenc$3 and debug$6	USPAT; EPO; JPO; Derwent; IBM TDB
17	BRS	L91	36	dependenc$3 and (code! adj object$1) and database$1 and trigger$1	USPAT; EPO; JPO; Derwent; IBM TDB
18	BRS	L103	8	dependenc$3 and (code! adj object$1) and database$1 and trigger$1 and debug$6 and recursive$2	USPAT; EPO; JPO; Derwent; IBM TDB
19	BRS	L109	5	dependenc$3 and (code! adj object$1) and database$1 and (object$1oriented) and debug$6 and recursive$2	USPAT; EPO; JPO; Derwent; IBM TDB
20	BRS	L115	9	(data$1base$1) and (code! adj object$1) and (data! adj stored!) and (object$1oriented) and package$1 and dependenc$3 and type$1	USPAT; EPO; JPO; Derwent; IBM TDB

	Type	L #	Hits	Search Text	DBs
21	BRS	L121	2	115 and specification$1 and trigger$1	USPAT; EPO; JPO; Derwent; IBM TDB
22	BRS	L127	34	recursive and dependenc$3 and (dependency! adj graph!)	USPAT; EPO; JPO; Derwent; IBM TDB
23	BRS	L133	11	127 and debug$6 and (data! adj structure!)	USPAT; EPO; JPO; Derwent; IBM TDB

	Type	L #	Hits	Search Text	DBs
1	BRS	L1	3	((dependency! adj graph$6) and debug$6 and package$1)	USPAT; EPO; JPO; Derwent; IBM TDB
2	BRS	L7	0	1 and (code! adj object$1)	USPAT; EPO; JPO; Derwent; IBM TDB
3	BRS	L13	256	(code! adj object$1) and (object$1oriented)	USPAT; EPO; JPO; Derwent; IBM TDB
4	BRS	L19	15	13 and recursive and dependenc$3	USPAT; EPO; JPO; Derwent; IBM TDB
5	BRS	L25	4	19 and debug$6	USPAT; EPO; JPO; Derwent; IBM TDB
6	BRS	L31	3	25 and database$1	USPAT; EPO; JPO; Derwent; IBM TDB
7	BRS	L37	2	31 and pars$3 and incorporat$3	USPAT; EPO; JPO; Derwent; IBM TDB
8	BRS	L43	0	((dependency! adj tree$1) and trigger$1 and debug$6)	USPAT; EPO; JPO; Derwent; IBM TDB
9	BRS	L55	0	49 and (code! adj object$1) and (object$1oriented)	USPAT; EPO; JPO; Derwent; IBM TDB
10	BRS	L49	3	((dependency! near4 tree$1) and trigger$1 and debug$6)	USPAT; EPO; JPO; Derwent; IBM TDB
11	BRS	L61	0	((dependency! adj tree$1) and (code! adj object$1))	USPAT; EPO; JPO; Derwent; IBM TDB
12	BRS	L67	27	dependency! adj tree$1	USPAT; EPO; JPO; Derwent; IBM TDB
13	BRS	L73	3	67 and recursive and dependenc$3	USPAT; EPO; JPO; Derwent; IBM TDB
14	BRS	L79	0	73 and debug$6	USPAT; EPO; JPO; Derwent; IBM TDB
15	BRS	L85	1	73 and database$1	USPAT; EPO; JPO; Derwent; IBM TDB

	Document ID	Kind Codes	Source	Issue Date	Pages	Title
1	US 5675730 A		EPO	19971007	9	Method and apparatus for extensible type-specific data presentation by a debugger
2	US 4558413 A		USPAT	19851210	58	Software version management system
3	US 4953084 A		USPAT	19900828	24	Method and apparatus using variable ranges to support symbolic debugging of optimized code
4	US 5170465 A		USPAT	19921208	33	Incremental-scanning compiler for source-code development system
5	US 5175856 A		USPAT	19921229	34	Computer with integrated hierarchical representation (IHR) of program wherein IHR file is available for debugging and optimizing during target execution
6	US 5325531 A		USPAT	19940628	34	Compiler using clean lines table with entries indicating unchanged text lines for incrementally compiling only changed source text lines
7	US 5361351 A		USPAT	19941101	26	System and method for supporting run-time data type identification of objects within a computer program
8	US 5442791 A		USPAT	19950815	33	Integrated remote execution system for a heterogenous computer network environment

		Abstract	Current OR	Retrieval Classif
1				
2			707/203	
3			717/4	
4			717/7	
5			717/4	
6			717/8	
7			717/4	
8			709/330	

	Current XRef	Inventor	U	S	C	P	1	2	3	4	5
1		PERDUE, CRISPIN S , WEATHERFORD, DAVID W , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
2	717/11 ; 717/5	Schmidt, Eric E. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
3	714/38 ; 717/6 ; 717/9	Meloy, Sue A. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
4	717/10	McKeeman, William M. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
5	717/7 ; 717/9	Van Dyke, Don A. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
6	717/10	McKeeman, William M. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
7	717/5	Lenkov, Dmitry , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
8	709/202 ; 709/226 ; 709/229	Wrabetz, Joan M. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐

	Document ID	Kind Codes	Source	Issue Date	Pages	Title
9	US 5526485 A		USPAT	19960611	13	Just-in-time debugging system and methods under the windows 3.0 and windows 3.1 operating systems
10	US 5560009 A		USPAT	19960924	28	Generating symbolic debug information by merging translation and compiler debug information
11	US 5586328 A		USPAT	19961217	25	Module dependency based incremental compiler and method
12	US 5651111 A		USPAT	19970722	16	Method and apparatus for producing a software test system using complementary code to resolve external dependencies
13	US 5675730 A		USPAT	19971007	9	Method and apparatus for extensible type-specific data presentation by a debugger
14	US 5732210 A		USPAT	19980324	14	Use of dynamic translation to provide fast debug event checks
15	US 5758160 A		USPAT	19980526	24	Method and apparatus for building a software program using dependencies derived from software component interfaces
16	US 5764989 A		USPAT	19980609	28	Interactive software development system
17	US 5812850 A		USPAT	19980922	36	Object-oriented symbolic debugger using a compiler driven database and state modeling to control program execution

	Abstract	Current OR	Retrieval Classif
9		714/38	
10		717/4	
11		717/5	
12		714/38	
13		714/38	
14		714/38	
15		717/1	
16		717/4	
17		717/4	

	Current XRef	Inventor	U	S	C	P	1	2	3	4	5
9		Brodsky, Mark A.	☐	☒	☐	☐	☐	☐	☐	☐	☐
10	717/5	Lenkov, Dmitry , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
11		Caron, Ilan G. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
12	717/1	McKeeman, William M. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
13	717/1	Perdue, Crispin S. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
14	714/35 ; 717/4 ; 717/5	Buzbee, William B.	☐	☒	☐	☐	☐	☐	☐	☐	☐
15	703/2 ; 717/2 ; 717/3	McInerney, Peter Joseph , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
16		Gustafsson, Niklas , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
17		Wimble, Michael D.	☐	☒	☐	☐	☐	☐	☐	☐	☐

	Document ID	Kind Codes	Source	Issue Date	Pages	Title
18	US 5832484 A		USPAT	19981103	52	Database system with methods for parallel lock management
19	US 5848274 A		USPAT	19981208	30	Incremental byte code compilation system
20	US 5864862 A		USPAT	19990126	34	System and method for creating reusable components in an object-oriented programming environment
21	US 5872973 A		USPAT	19990216	25	Method for managing dynamic relations between objects in dynamic object-oriented languages
22	US 6108659 A		USPAT	20000822	13	Method and apparatus for executing stored code objects in a database

	Abstract	Current OR	Retrieval Classif
18		707/8	
19		717/5	
20		707/103	
21		709/332	
22		707/101	

	Current XRef	Inventor	U	S	C	P	1	2	3	4	5
18	707/9 ; 709/103 ; 709/107	Sankaran, Mohan , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
19	709/331 ; 717/6	Hamby, John , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
20	707/101 ; 707/102	Kriens, Peter , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
21	709/317 ; 709/330 ; 717/2	Mitchell, David C. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
22	707/2 ; 714/38 ; 717/4	Vincent, John K.	☐	☒	☐	☐	☐	☐	☐	☐	☐

	Document ID	Kind Codes	Source	Issue Date	Pages	Title
1	US 5170465 A		USPAT	19921208	33	Incremental-scanning compiler for source-code development system
2	US 5182806 A		USPAT	19930126	33	Incremental compiler for source-code development system
3	US 5193191 A		USPAT	19930309	34	Incremental linking in source-code development system
4	US 5201050 A		USPAT	19930406	33	Line-skip compiler for source-code development system
5	US 5301327 A		USPAT	19940405	32	Virtual memory management for source-code development system
6	US 5313387 A		USPAT	19940517	32	Re-execution of edit-compile-run cycles for changed lines of source code, with storage of associated data in buffers
7	US 5325531 A		USPAT	19940628	34	Compiler using clean lines table with entries indicating unchanged text lines for incrementally compiling only changed source text lines
8	US 5367683 A		USPAT	19941122	36	Smart recompilation of performing matchup/difference after code generation
9	US 5421004 A		USPAT	19950530	59	Hierarchical testing environment
10	US 5423027 A		USPAT	19950606	19	Tool for error detection in software using aspect specification
11	US 5446899 A		USPAT	19950829	37	Hint generation in smart recompilation

	Abstract	Current OR	Retrieval Classif
1		717/7	
2		717/7	
3		717/5	
4		717/7	
5		717/3	
6		700/90	
7		717/8	
8		717/9	
9		714/25	
10		714/38	
11		717/5	

	Current XRef	Inventor	U	S	C	P	1	2	3	4	5
1	717/10	McKeeman, William M. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
2	714/38 ; 717/10	McKeeman, William M. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
3	717/10	McKeeman, William M. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
4	717/10	McKeeman, William M. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
5	711/203 ; 711/4 ; 717/10 ; 717/6	McKeeman, William M. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
6	717/5	McKeeman, William M. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
7	717/10	McKeeman, William M. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
8	717/10 ; 717/11	Brett, Bevin R.	☐	☒	☐	☐	☐	☐	☐	☐	☐
9		Carpenter, Eric R. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
10		Jackson, Daniel N.	☐	☒	☐	☐	☐	☐	☐	☐	☐
11		Brett, Bevin R.	☐	☒	☐	☐	☐	☐	☐	☐	☐

·	Document ID	Kind Codes	Source	Issue Date	Pages	Title
12	US 5493675 A		USPAT	19960220	73	Compiler back end calling predetermined front end routines that use effect and dependency indicators to provide information to the compiler to determine the validity of an optimi ation
13	US 5535392 A		USPAT	19960709	37	Using hint generation to cause portions of object files to remain the same
14	US 5577253 A		USPAT	19961119	100	Analyzing inductive expressions in a multilanguage optimizing compiler
15	US 5586328 A		USPAT	19961217	25	Module dependency based incremental compiler and method
16	US 5613117 A		USPAT	19970318	55	Optimizing compiler using templates corresponding to portions of an intermediate language graph to determine an order of evaluation and to allocate lifetimes to temporary names for variables
17	US 5625822 A		USPAT	19970429	38	Using sorting to do matchup in smart recompilation
18	US 5659753 A		USPAT	19970819	75	Interface for symbol table construction in a multilanguage optimizing compiler
19	US 5764989 A		USPAT	19980609	28	Interactive software development system

	Abstract	Current OR	Retrieval Classif
12		717/9	
13		717/8	
14		717/5	
15		717/5	
16		717/8	
17		717/5	
18		717/5	
19		717/4	

	Current XRef	Inventor	U	S	C	P	1	2	3	4	5
12		Faiman, Jr., Robert N. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
13		Brett, Bevin R.	☐	☒	☐	☐	☐	☐	☐	☐	☐
14		Blickstein, David S.	☐	☒	☐	☐	☐	☐	☐	☐	☐
15		Caron, Ilan G. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
16		Davidson, Caroline S. , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
17	717/10	Brett, Bevin R.	☐	☒	☐	☐	☐	☐	☐	☐	☐
18	717/8	Murphy, Dennis Joseph , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
19		Gustafsson, Niklas , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐

	Document ID	Kind Codes	Source	Issue Date	Pages	Title
20	US 5836014 A		USPAT	19981110	72	Method of constructing a constant-folding mechanism in a multilanguage optimizing compiler
21	US 5848274 A		USPAT	19981208	30	Incremental byte code compilation system
22	US 5864862 A		USPAT	19990126	34	System and method for creating reusable components in an object-oriented programming

	Abstract	Current OR	Retrieval Classif
20		717/7	
21		717/5	
22		707/103	

	Current XRef	Inventor	U	S	C	P	1	2	3	4	5
20	717/9	Faiman, Jr., Robert Neil	☐	☒	☐	☐	☐	☐	☐	☐	☐
21	709/331 ; 717/6	Hamby, John , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐
22	707/101 ; 707/102	Kriens, Peter , et al.	☐	☒	☐	☐	☐	☐	☐	☐	☐

	Document ID	Kind Codes	Source	Issue Date	Pages	Title
1	US 5764989 A		USPAT	19980609	28	Interactive software development system
2	US 5812850 A		USPAT	19980922	36	Object-oriented symbolic debugger using a compiler driven database and state modeling to control program execution
3	US 5848274 A		USPAT	19981208	30	Incremental byte code compilation system
4	US 5864862 A		USPAT	19990126	34	System and method for creating reusable components in an object-oriented programming environment
5	US 5872973 A		USPAT	19990216	25	Method for managing dynamic relations between objects in dynamic object-oriented

	Abstract	Current OR	Retrieval Classif
1		717/4	
2		717/4	
3		717/5	
4		707/103	
5		709/332	